Figure 1

Figure 3

Figure 2
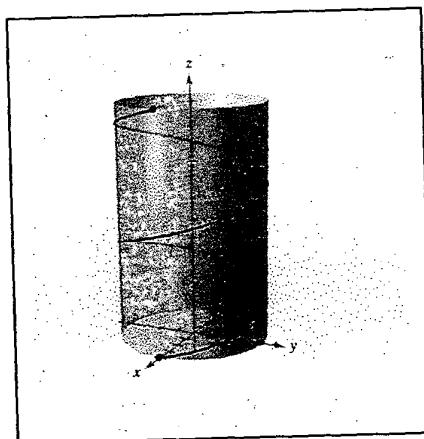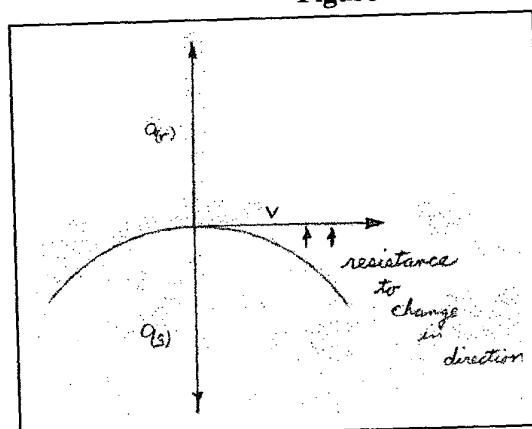
Figure 4

INVENTOR

John P Foster
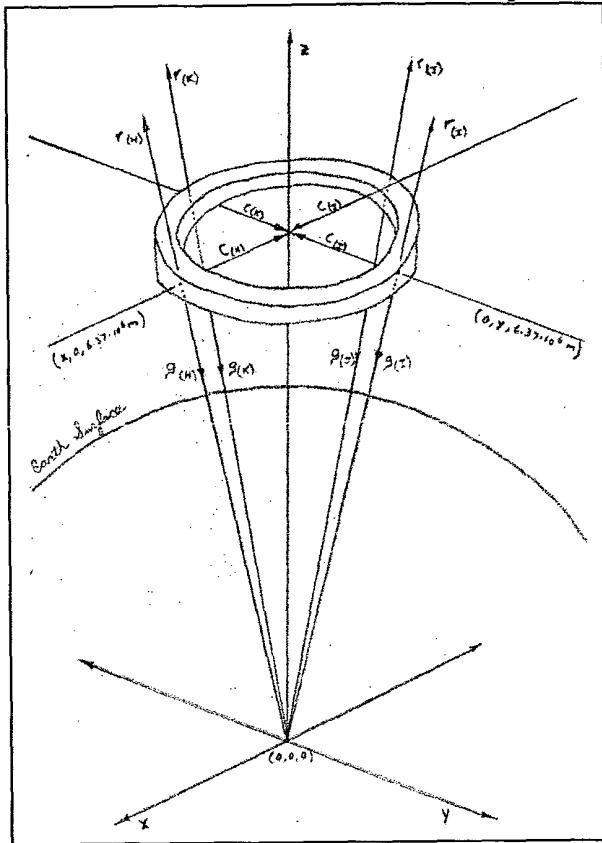
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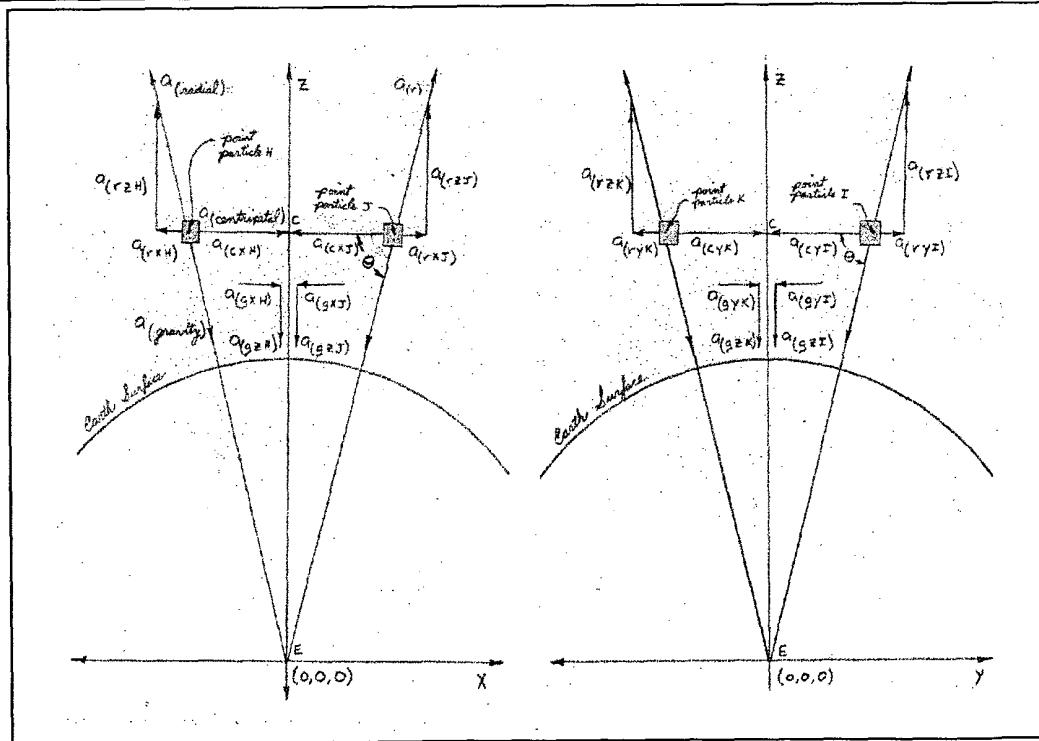
Figure 6

INVENTOR

John P Foster

$F_{(C)} = F_{(H)} + F_{(J)} + F_{(I)} + F_{(K)}$

On the x,z plane

$F_{(H)} = \frac{1}{4}m \times a_{(H)} = \frac{1}{4}m \times [a_{(rxH)} i + a_{(rzH)} k + a_{(cxH)} i + a_{(czH)} k + a_{(gxH)} i + a_{(gzH)} k]$

$F_{(J)} = \frac{1}{4}m \times a_{(J)} = \frac{1}{4}m \times [a_{(rxJ)} i + a_{(rzJ)} k + a_{(cxJ)} i + a_{(czJ)} k + a_{(gxJ)} i + a_{(gzJ)} k]$

On the y,z plane

$F_{(I)} = \frac{1}{4}m \times a_{(I)} = \frac{1}{4}m \times [a_{(ryI)} j + a_{(rzI)} k + a_{(cyI)} j + a_{(czI)} k + a_{(gyI)} j + a_{(gzI)} k]$

$F_{(K)} = \frac{1}{4}m \times a_{(K)} = \frac{1}{4}m \times [a_{(ryK)} j + a_{(rzK)} k + a_{(cyK)} j + a_{(czK)} k + a_{(gyK)} j + a_{(gzK)} k]$

Expand the equations and sum, such that component parts equal

radial acceleration $= v^2/r_{earth+alt} \times$ (ratio of sides)

Centripetal acceleration $= v^2/r_{ring} \times$ (ratio of sides)

Gravity acceleration $= (a_g) \times$ (ratio of sides)

$F_{(H)} = \frac{1}{4}m [v^2/_{EH}(CH/EH)i + v^2/_{EH}(EC/EH) k + v^2/_{CH}(HC/HC) i + 0 k + (a_g)_{HE}(HC/HE) i + (a_g)_{HE}(CE/HE) k]$

$F_{(J)} = \frac{1}{4}m [v^2/_{EJ}(CJ/EJ) i + v^2/_{EJ}(EC/EJ) k + v^2/_{CJ}(JC/CJ) i + 0 k + (a_g)_{JE}(JC/JE) i + (a_g)_{JE}(CE/JE) k]$

$F_{(I)} = \frac{1}{4}m [v^2/_{EI} (CI/EI) j + v^2/_{EI} (EC/EI) k + v^2/_{CI} (IC/CI) j + 0 k + (a_g)_{IE}(IC/IE) j + (a_g)_{IE}(CE/IE) k]$

$F_{(K)} = \frac{1}{4}m[v^2/_{EK}(CK/EK)j + v^2/_{EK}(EC/EK) k + v^2/_{CK} (KC/KC) j + 0 k + (a_g)_{KE}(KC/KE) j + (a_g)_{KE}(CE/KE) k]$

$F_{(C)} = \frac{1}{4}m\{[0i+0j]+4[v^2/(r_{planet}+ alt)(EC/(r_{planet}+ alt) k]+[0i+0j] + 0 k+ [0i+0j] + [4 (a_g) CE/(r_{planet}+ alt)k]\}$

$F_{(C)} = m [v^2/(r_{planet}+ alt) + a_g] (EC/(r_{planet}+ alt) k = m_{particle\ stream}a_{(z)} =$ **VERTICAL THRUST**

$a_{(z)} = [v^2/(r_{planet}+ alt) + a_g] k \times \sin(\theta)$

where $\sin(\theta) = opp/hyp = [(r_{doughnut\ center})/(r_{point\ particle}) \approx \sin(90^0) \approx 1$

Therefore; $a_{(z)} \approx v^2/r + a_g$

Figure 7

Theoretic example, Thrust by Gyroscopic Lift with a Particle Accelerator:

50 milligrams of ionized particles, continuously traveling along a circular path at 60% velocity of light should provide 2.54×10^5 Newtons of upward thrust.

$F_{particles} = m_{particles} \times a_z$, m measured in Kg

$F = m \times [v^2/(r_{planet}+ alt) + g]$

$F = 50 \times 10^{-6} \times [(2.998 \times 10^8 \times .60)^2/ (6.371 \times 10^6) -9.821] = 253,938$ N

Figure 8

Theoretic example, Vertical Acceleration of Ship with Particle Accelerators

$F_{particles} + F_{gravity} = F_{ship}$,

$F_{particles} + F_{gravity} = m_{ship} \times a_{ship}$

$F_{particles} + (m_{ship} \times g) = m_{ship} \times a_{ship}$

$[F_{particles} + (m_{ship} \times g)] / m_{ship} = a_{ship}$

$[(2 \times 2.54 \times 10^5) + (40 \times 10^3 \times {}^-9.821)]/ (40 \times 10^3) = 2.879$ m/s^2

2.879 m/s^2 / 9.821 m/s^2 = $.2931$ g's

Figure 9 **INVENTOR**

John P Foster
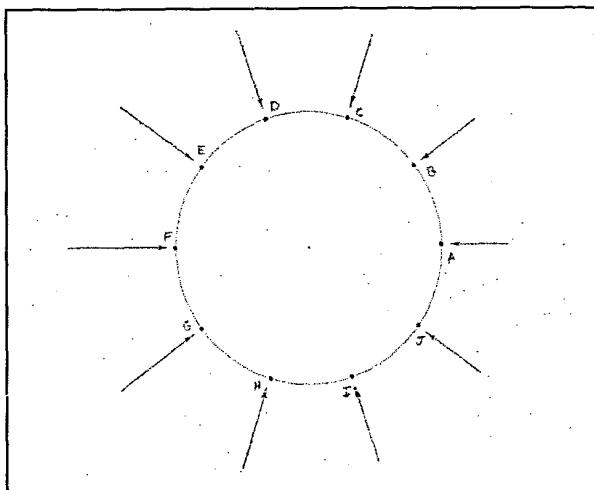
Figure 10
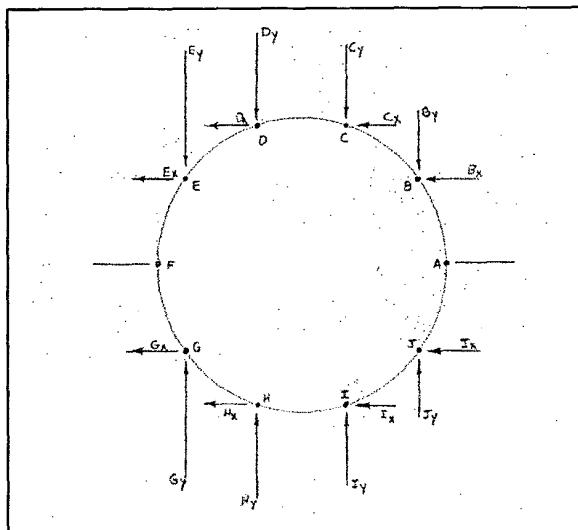
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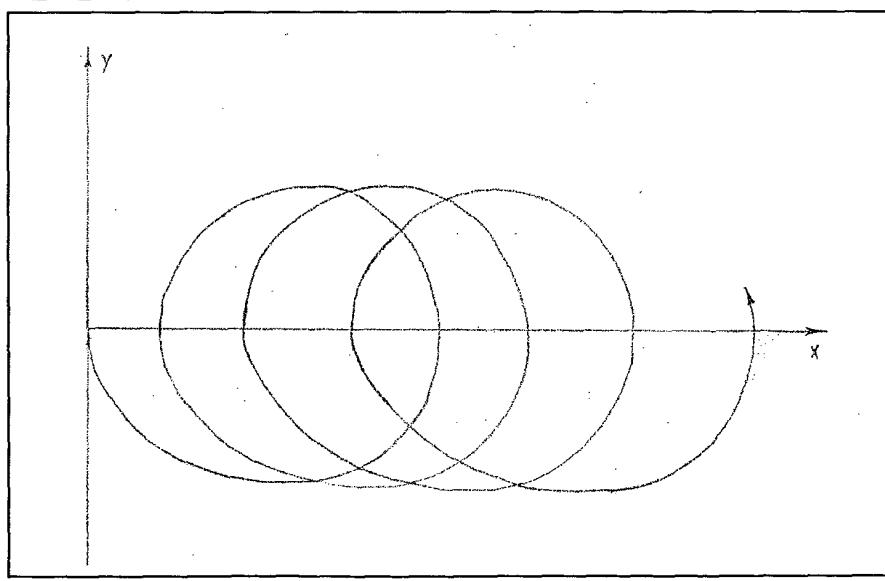
Figure 12

INVENTOR

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